Create a Pivot Table to Find Item-wise Units Sold

Aim

To create a Pivot table using Pandas and find the item-wise units sold from a sales dataset.

Algorithm

1. Import the required libraries (pandas)
2. Load the sales data into a DataFrame
3. Create a pivot table using pd.pivot_table()
    - Set the 'Item' column as the index
    - Set 'Units' as the values to be aggregated
    - Use 'sum' as the aggregation function
4. Display the resulting pivot table

Code

```
import pandas as pd


data = {
    'OrderDate': ['1-6-18', '1-23-18', '2-9-18', '2-26-18', '3-15-18'],
    'Region': ['East', 'Central', 'Central', 'Central', 'West'],
    'Manager': ['Martha', 'Hermann', 'Hermann', 'Timothy', 'Timothy'],
    'SalesMan': ['Alexander', 'Shelli', 'Luis', 'David', 'Stephen'],
    'Item': ['Television', 'Home Theater', 'Television', 'Cell Phone', 'Television'],
    'Units': [95, 50, 36, 27, 56],
    'Unit_price': [1198.00, 500.00, 1198.00, 225.00, 1198.00],
    'Sale_amt': [113810.00, 25000.00, 43128.00, 6075.00, 67088.00]
}

df = pd.DataFrame(data)

pivot_table = pd.pivot_table(df, values='Units', index='Item', aggfunc='sum')
print(pivot_table)
```

Output

```
                Units
Item
Cell Phone         27
Home Theater       50
Television        187
```

Result

The pivot table successfully shows the total units sold for each item. Television has the highest number of units sold at 187, followed by Home Theater at 50 units, and Cell Phone at 27 units.